

New England Biolabs Certificate of Analysis

Product Name: AsiSI
Catalog Number: R0630S
Concentration: 10,000 U/ml
Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of XhoI digested pXba in 1 hour at 37°C in a total reaction volume of 50 µl.
Packaging Lot Number: 10076876
Expiration Date: 10/2021
Storage Temperature: -20°C
Storage Conditions: 300 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 500 µg/ml BSA
Specification Version: PS-R0630S/L v1.0

AsiSI Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
R0630SVIAL	AsiSI	10070976	Pass
B7204SVIAL	CutSmart® Buffer	10074632	Pass
B7024SVIAL	Gel Loading Dye, Purple (6X)	10075962	Pass

Assay Name/Specification	Lot # 10076876
<p>Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of a mixture of single and double-stranded [³H] E. coli DNA and a minimum of 10 units of AsiSI incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.</p>	Pass
<p>Ligation and Recutting (Terminal Integrity) After a 2-fold over-digestion of pXbaI (Xho digested) DNA with AsiSI, ~75% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, >95% can be recut with AsiSI.</p>	Pass
<p>Non-Specific DNase Activity (16 hour) A 50 µl reaction in CutSmart™ Buffer containing 1 µg of pXbaI (Xho digested) DNA and a minimum of 10 Units of AsiSI incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. NOTE: although no nuclease degradation is detected under these conditions, extended incubations and/or high concentrations of this enzyme may result in star activity. See the product FAQ for recommended reaction conditions for</p>	Pass

Assay Name/Specification	Lot # 10076876
this enzyme.	

This product has been tested and shown to be in compliance with all specifications.

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.



Penghua Zhang
Production Scientist
31 Jul 2020



Michael Tonello
Packaging Quality Control Inspector
31 Jul 2020